

Title (en)

ELECTRIC ARC FURNACE AND METHOD FOR OPERATING SAME

Title (de)

ELEKTROLICHTBOGENOFEN UND VERFAHREN ZU SEINEM BETRIEB

Title (fr)

FOUR À ARC ÉLECTRIQUE ET SON PROCÉDÉ DE FONCTIONNEMENT

Publication

**EP 2783548 B1 20170607 (DE)**

Application

**EP 12798195 A 20121115**

Priority

- DE 102011087065 A 20111124
- EP 2012072707 W 20121115

Abstract (en)

[origin: WO2013075999A1] The invention relates to an electric arc furnace and a method for operating same. The electric arc furnace comprises a lower vessel and a lid 120 placed on said lower vessel. The lower vessel has a tapping device for tapping molten metal. At least one electrode protrudes through the lid into the interior of the electric arc furnace, said electrode being held by an electrode holding device. A voltage supply device 150 is provided for supplying an electric direct current or alternating current to the electrode 130. The aim of the invention is to allow a continuous operation of the electric arc furnace. This is achieved in that the electrode holding device has an electrode adjusting device for adjusting the electrode dependent on the wear of the electrode and an electrode nippling device for nippling the electrode during the operation of the electric arc furnace. According to the invention, both the electrode adjusting device as well as the electrode nippling device 144 operate when the supply voltage of the electrode is switched on.

IPC 8 full level

**H05B 7/109** (2006.01); **H05B 7/14** (2006.01)

CPC (source: EP US)

**F27B 3/085** (2013.01 - EP US); **H05B 7/109** (2013.01 - EP US); **H05B 7/14** (2013.01 - EP US); **Y02P 10/25** (2015.11 - EP US)

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

**DE 102011087065 A1 20130529**; BR 112014012702 A2 20170627; CN 104115554 A 20141022; CN 104115554 B 20160831;  
EP 2783548 A1 20141001; EP 2783548 B1 20170607; ES 2639489 T3 20171026; IN 4647CHN2014 A 20150918; KR 101588631 B1 20160126;  
KR 20140098151 A 20140807; RU 2014125423 A 20151227; RU 2579410 C2 20160410; TW 201341536 A 20131016; TW I576438 B 20170401;  
US 2014355642 A1 20141204; US 2018340734 A1 20181129; WO 2013075999 A1 20130530

DOCDB simple family (application)

**DE 102011087065 A 20111124**; BR 112014012702 A 20121115; CN 201280067217 A 20121115; EP 12798195 A 20121115;  
EP 2012072707 W 20121115; ES 12798195 T 20121115; IN 4647CHN2014 A 20140619; KR 20147016717 A 20121115;  
RU 2014125423 A 20121115; TW 101143219 A 20121120; US 201214360063 A 20121115; US 201815952325 A 20180413